

WE CLAIM:

1. A two-part bicarbonate containing solution, the solution comprising:
- 5 a first part housed in a first container, the first part including an alkaline bicarbonate concentrate having a pH ranging from about 8.6 to 10.0;
- a second part housed in a second container, the second part including an acidic concentrate having a pH ranging from about 1.0 to 3.0, the pH of the acidic concentrate effective to obtain, when the first part and the second part are mixed together, a mixed solution having a pH ranging from 6.5 to 7.6.
- 10 2. The solution of Claim 1 wherein the first container is a first chamber of a multi-chamber container and the second container is a second chamber of the multi-chamber container.
- 15 3. The solution of Claim 1 wherein the mixed solution comprises:
- bicarbonate mM 5 to 45; and
- calcium mM 0.2 to 2.0.
4. The solution of Claim 1 wherein the mixed solution comprises:
- bicarbonate mM 5 to 45;
- calcium mM 0.2 to 2.0;
- sodium mM 100 to 150;
- 20 magnesium mM 0 to 1.5;
- potassium mM 0 to 4.5;
- chloride mM 70 to 120;
- lactate mM 0 to 60; and
- acetate mM 0 to 60.

660760" CH4EE60

T, C290

29

5. The solution of Claim 1 further comprising an osmotic agent selected from the group consisting of: glucose; glucose polymers; modified starch; amino acids; peptides; and glycerol.

6. The solution of Claim 1 wherein the first and second containers are constructed of gas permeable material.

7. A multi-chamber container for storing a bicarbonate solution, the container comprising:

a first chamber housing an alkaline bicarbonate concentrate, the alkaline bicarbonate concentrate having a pH ranging from about 8.6 to 10.0; and

a second chamber housing an acidic concentrate, the acidic concentrate having a pH ranging from about 1.0 to 3.0.

8. The multi-chamber container of Claim 7 wherein the acidic concentrate has a pH effective to obtain, when the alkaline bicarbonate concentrate is mixed with the acidic concentrate, a mixed solution having a pH ranging from about 6.5 to 7.6.

9. The multi-chamber container of Claim 7 wherein each of the chambers is constructed from a gas permeable material.

10. The multi-chamber container of Claim 7 wherein the alkaline bicarbonate solution comprises: sodium chloride; sodium lactate; and sodium bicarbonate.

11. The multi-chamber container of Claim 7 wherein the acidic concentrate comprises: glucose; calcium chloride; magnesium chloride; and an acid.

12. A method for stabilizing bicarbonate solutions, the method comprising the steps of:

housing an alkaline bicarbonate concentrate in the first container,

adjusting the pH of the alkaline bicarbonate concentrate to a range of about 8.6 to 10.0;

housing an acidic concentrate in the second container, and

adjusting the acidic concentrate to a pH ranging from about 1.0 to 3.0.

5 13. The method of Claim 12 wherein the step of adjusting the acidic concentrate is further defined by adjusting the acidic concentrate to a pH effective to obtain, when the alkaline bicarbonate concentrate is mixed with the acidic concentrate, a mixed solution having a pH ranging from about 6.5 to 7.6.

10 14. The method of Claim 12 wherein the first container is a first chamber of a multi-chamber container and the second container is a second chamber of the multi-chamber container.

15 15. The method of Claim 12 wherein the first and second containers are constructed from a gas permeable material.

16 16. The method of Claim 12 further comprising the step of steam sterilizing the first and second containers.

17. The method of Claim 12 wherein the alkaline bicarbonate solution comprises: sodium chloride; sodium lactate; and sodium bicarbonate.

18. The method of Claim 12 wherein the acidic concentrate comprises: glucose; calcium chloride; magnesium chloride; and an acid.

20 19. The method of Claim 12 wherein the step of adjusting the pH of the bicarbonate concentrate further comprises adding a physiologically acceptable base to the bicarbonate concentrate having an original pH of 8.0-8.4 to increase the pH thereto to the pH ranging from about 8.6 to 10.

25 20. The method of Claim 12 wherein the step of adjusting the pH of the acidic concentrate further comprises adding a physiologically acceptable acid to

660T60" E4ZE6E60



the acidic concentrate having an original pH of about 4.0-7.0 to decrease the pH of the acidic concentrate to the pH ranging from about 1.0 to 3.0.

82
5/31/14

09393743-091099
660760"EHLE6660